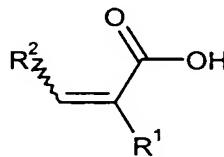


We claim:

1. An aqueous dispersion comprising at least one ethylene copolymer wax comprising from 60 to 99.5% by weight of ethylene and from 0.5 to 40% by weight of at least one ethylenically unsaturated carboxylic acid in copolymerized form and also at least one hydrophobic low molecular weight organic substance.
2. A dispersion as claimed in claim 1, wherein at least one ethylenically unsaturated carboxylic acid is a carboxylic acid of the formula I



in which the radicals are defined as follows:

R¹ is selected from among hydrogen and unbranched or branched C₁-C₁₀-alkyl,
R² is selected from among hydrogen, unbranched or branched C₁-C₁₀-alkyl and
COOH, COOCH₃, COOC₂H₅.

3. A dispersion as claimed in claim 1 or 2, wherein at least one low molecular weight hydrophobic substance is an oil-soluble dye.
4. A dispersion as claimed in any of claims 1 to 3, wherein the low molecular weight hydrophobic substance is selected from among distyryl compounds and benzoxazole derivatives.
5. A process for preparing aqueous dispersions as claimed in any of claims 1 to 4, which comprises firstly mixing one or more ethylene copolymer waxes with at least one hydrophobic low molecular weight organic substance and subsequently dispersing the mixture in water.
6. The use of dispersions as claimed in any of the preceding claims in paper coating.

7. A paper coating composition comprising a dispersion as claimed in any of the preceding claims.
8. Paper containing oil-soluble fluorescent dyes.
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9. Paper treated with a paper coating composition as claimed in claim 7.